



Second Periodic Review

Western Batteries
1127 NW 54th Street
Seattle, WA 98107

Facility Site ID#: 2248
Cleanup Site ID#: 1946

Completed by:
Washington State Department of Ecology
Northwest Region Office
Toxics Cleanup Program

June 2015

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1.0 INTRODUCTION

This document is the second periodic review conducted by the Washington State Department of Ecology (Ecology) of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected at the Western Batteries Site (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed through the Voluntary Cleanup Program (VCP) under VCP No. NW0653. The cleanup actions resulted in residual concentrations of lead exceeding MTCA unrestricted cleanup levels for soil. The MTCA cleanup levels for soil are established under Ch. 173-340-740 WAC. As a result of residual contamination, institutional controls were required for the Site to be eligible for a No Further Action (NFA) determination. WAC 173-340-420(2) requires Ecology conduct a periodic review of a site every five years under the following conditions:

1. Whenever Ecology conducts a cleanup action.
2. Whenever Ecology approves a cleanup action under an order, agreed order or consent decree.
3. Or, as resources permit, whenever Ecology issues a no further action opinion
4. And one of the following conditions exists:
 - (a) Institutional controls or financial assurance are required as part of the cleanup.
 - (b) Where the cleanup level is based on a practical quantitation limit.
 - (c) Where, in Ecology's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors Ecology shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions.
- (b) New scientific information for individual hazardous substances of mixtures present at the Site.
- (c) New applicable state and federal laws for hazardous substances present at the Site.
- (d) Current and projected Site use.
- (e) Availability and practicability of higher preference technologies.
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

Ecology shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site History

The Site is located at 1127 N.W. 54th Street in a mixed residential/commercial/industrial neighborhood in the Ballard District of Seattle. The Property consists of 0.2 acres of land located adjacent to the original Vaupell Industrial Plastics building. The Site has been used historically for industrial operations, and is currently zoned by the City of Seattle for industrial use. The Site is expected to be used for industrial purposes for the foreseeable future. The tax parcel identification number for the Site is 276830-0545.

Western Batteries Inc. occupied the Site from approximately 1975 until 1989. During that time the Site was used for battery and equipment storage and parking. The facility stored batteries and shipped them for recycling. Vaupell Industrial Plastics (Vaupell) sold the property to a real estate holdings company in 1994, and the current building at the Site was constructed in 1996. The Site is completely covered by the concrete flooring and asphalt.

A vicinity map is available as Appendix 6.1 and a Site plan is available as Appendix 6.2.

2.2 Site Investigations

Ecology conducted a Site inspection in March 1990 revealing soil contamination with lead concentrations up to 77,000 milligrams per kilogram (mg/kg). Batteries were stored outside without cover or other protection from the elements. Many of the batteries had broken cases which resulted in the release of metals and corrosive acid to the ground surface. In addition, the neighboring property's vegetation looked stressed and the concrete had been acid-etched from runoff. A Site Hazard Assessment was conducted by Ecology for the Site in 1991, and the Site was ranked a "3" ("1" is the worst, "5" is the least worst).

In addition to lead contamination, total petroleum hydrocarbon (TPH) contamination in soil was suspected from a leaking underground storage tank.

2.3 Cleanup Levels and Point of Compliance

WAC 173-340-704 states that MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used. MTCA Method B cleanup levels may be used for substances where a MTCA Method A table value is not available, or where specific exposure pathways can be eliminated.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for contaminants at this Site. The cleanup actions conducted at the Site were determined to be 'routine', few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance. Though the Site is zoned industrial, it is adjacent to residential properties and industrial cleanup levels are not appropriate.

For soil, the point of compliance is the area where the soil cleanup levels must be attained. For this Site, the standard point of compliance is established as soils throughout the Site.

2.4 Remedial Actions

Independent cleanup work performed at the Site included soil removal, soil verification sampling, and backfilling the excavation area with crushed concrete materials. All work was performed in April and May, 1992, and included the following:

- Approximately 500 tons of soil and asphalt containing lead and acid were excavated from the Site and transported to a permitted hazardous waste facility for treatment and disposal in accordance with applicable state and federal regulations;
- Approximately 50 tons of soil containing fuel oil were excavated from the Site and transported to a City of Seattle solid waste transfer station for disposal as a municipal solid waste, also in accordance with applicable regulations;
- Following completion of soil verification sampling activities, excavated areas of the Site were capped with an average of 1 to 1-1/2 feet of crushed concrete materials. The Site was then used as a temporary parking facility;
- Crushed concrete backfill materials presently cover all soils with greater than 250 mg/kg lead and thus provide a barrier to potential contact with soils which exceed the Method A cleanup level;
- The relative cost to remove soils containing more than 250 mg/kg versus 500 mg/kg lead, generally following the “substantial and disproportionate” guidance outline prepared by Lynn Coleman in an Ecology memo dated September 9, 1993, supports institutional controls.

A map detailing residual lead concentrations is available as Appendix 6.3.

2.5 Institutional Controls

Based on the Site use, zoning, surface cover and cleanup levels, it was determined that the Site was eligible for a ‘No Further Action’ determination if a Restrictive Covenant was recorded for the property. A Restrictive Covenant was recorded for the Site in 1998 which imposed the following limitations:

1. The Property is 0.2 acres of land located adjacent to the Vaupell Industrial Plastics building. Western Batteries Inc. occupied the Property from approximately 1975 until 1989. During which time the Property was used for battery and equipment storage as well as parking. In 1992, a remedial action was conducted as described in the documents previously identified and on file at Ecology a NWRO. A site map showing location of residual contamination is attached to the covenant as Appendix A. Since the remedial action, a warehouse with a concrete/rebar floor has been constructed on the Property. The Property is completely covered by the concrete flooring as are adjacent areas that were also remediated in 1992. There is no human or environmental exposure to the soil.

-
- a. The Property shall be used only for traditional industrial/commercial purposes as described in RCW 70.105D.020(23) and defined in and allowed under the City of Seattle's zoning regulations codified in Chapter 23.50 of the Seattle Municipal Code as of the date of this Restrictive Covenant.
 - b. The Owner shall not alter, modify, or remove the existing structure in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway is prohibited. Examples of activities that are prohibited on the Property include: demolition of the building, drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the concrete with a rod, spike or similar item, bulldozing or earthwork. Any activity on the Property that interferes with the continued protection of human health and the environment is prohibited.
 2. The Owner of the Property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for maintenance of the Remedial Action.
 3. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.
 4. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.
 5. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.
 6. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The restrictive covenant is available as Appendix 6.4.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

3.1.1 Direct Contact

Based upon the Site visit conducted on June 8, 2015, the buildings and asphalt cover at the Site continue to eliminate the exposure to soils with concentrations that exceed residential cleanup standards. The Site surfaces appear in satisfactory condition and no repair, maintenance or contingency actions have been required. The Site continues to operate as a part of the Vaupell manufacturing complex. A photo log is available as Appendix 6.5.

Soils remain at the Site with lead concentrations that exceed MTCA Method A cleanup levels. The structures and asphalt surface further reduce human exposure to any residual contaminated soils, however the restrictive covenant does not require the maintenance of these structures and surfaces.

3.1.2 Groundwater

There is solvent contamination in groundwater on the adjacent Vaupell property. This groundwater contamination is not associated with the former Western Battery Site and is not addressed in the periodic review.

3.1.3 Institutional Controls

The restrictive covenant for the Site was recorded with King County and remains active and enforceable. There is no evidence that another instrument has been recorded that limits the applicability or effectiveness of the covenant. The restrictive covenant prohibits the use of groundwater from the Site, as well as activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the covenant. This restrictive covenant serves to assure the long term integrity of the remedy.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new scientific information for the petroleum contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

There are no new relevant state or federal laws for lead since remedial actions were completed at the Site. The Cleanup level for lead at the time of the NFA determination is still applicable and the cleanup action is still protective of human health and the environment.

3.4 Current and projected Site use

The Site is currently used for commercial and industrial purposes. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below MTCA Method A cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

This periodic review has resulted in the following conclusions:

- The cleanup remedy implemented at the Site is currently protective of human health and the environment.
- Unrestricted use soil cleanup levels have not been met at the Site; however, under WAC 173-340-740(6) (f), the cleanup action is determined to comply with cleanup standards, since the long-term integrity of the containment system is ensured.
- The Restrictive Covenant for the property is in place and continues to be effective in protecting public health from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant continue to be met. No additional cleanup actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the remedy is maintained.

4.1 NEXT REVIEW

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

Hart Crowser. *Site Characterization Study: Western Batteries, Inc., Facility, Seattle, Washington.* 1991.

Hart Crowser. *Cleanup Action Plan: Western Batteries, Inc., Facility, Seattle. Washington.* 1992.

Hart Crowser. *Site Remediation: Western Batteries, Inc., Facility, Seattle, Washington.* 1992.

King Co. Property Records. *Restrictive Covenant 9807060305.* July 6, 1998.

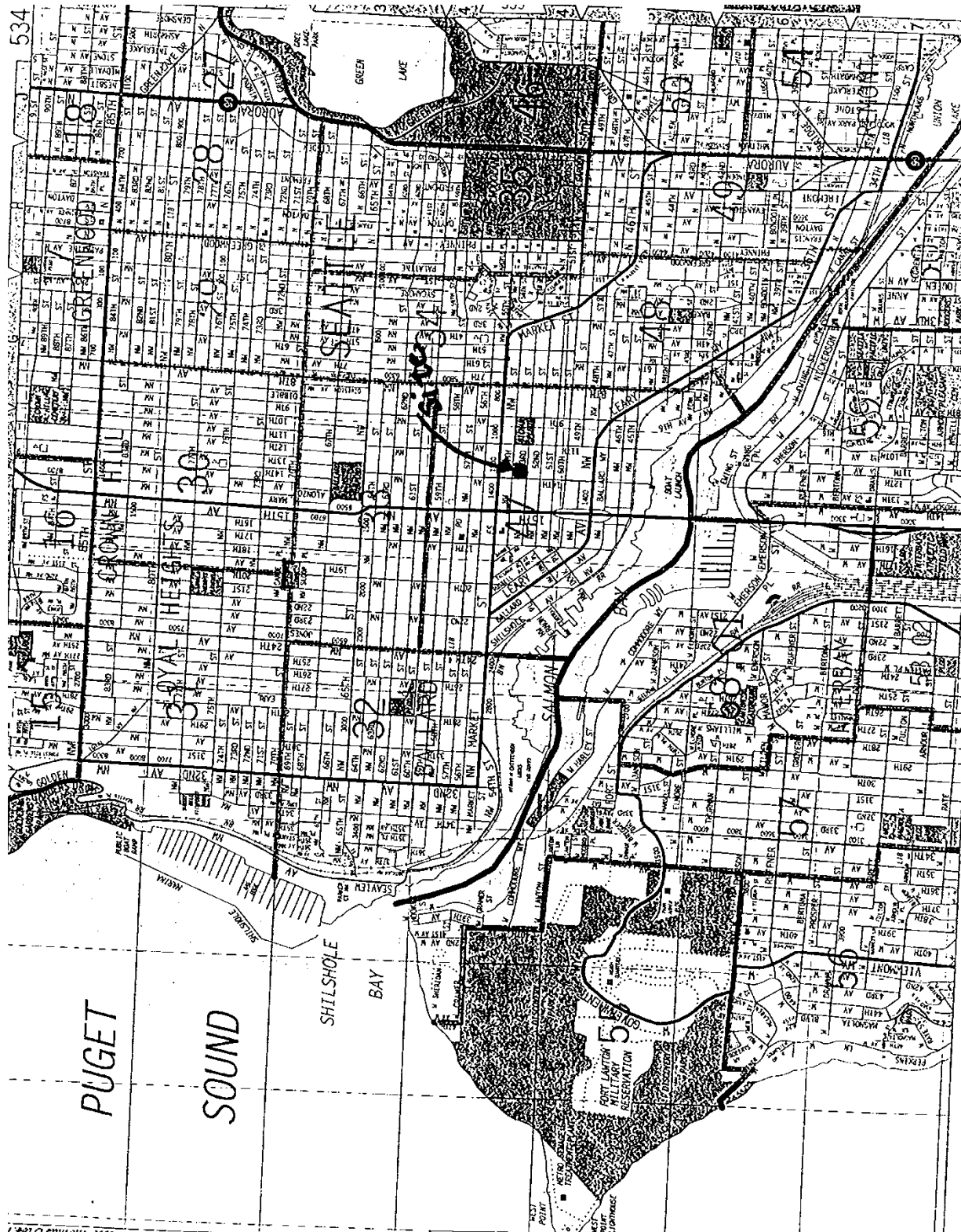
Ecology. *No Further Action Determination Letter.* August 82, 1998.

Ecology. *Periodic Review.* June 21, 2010.

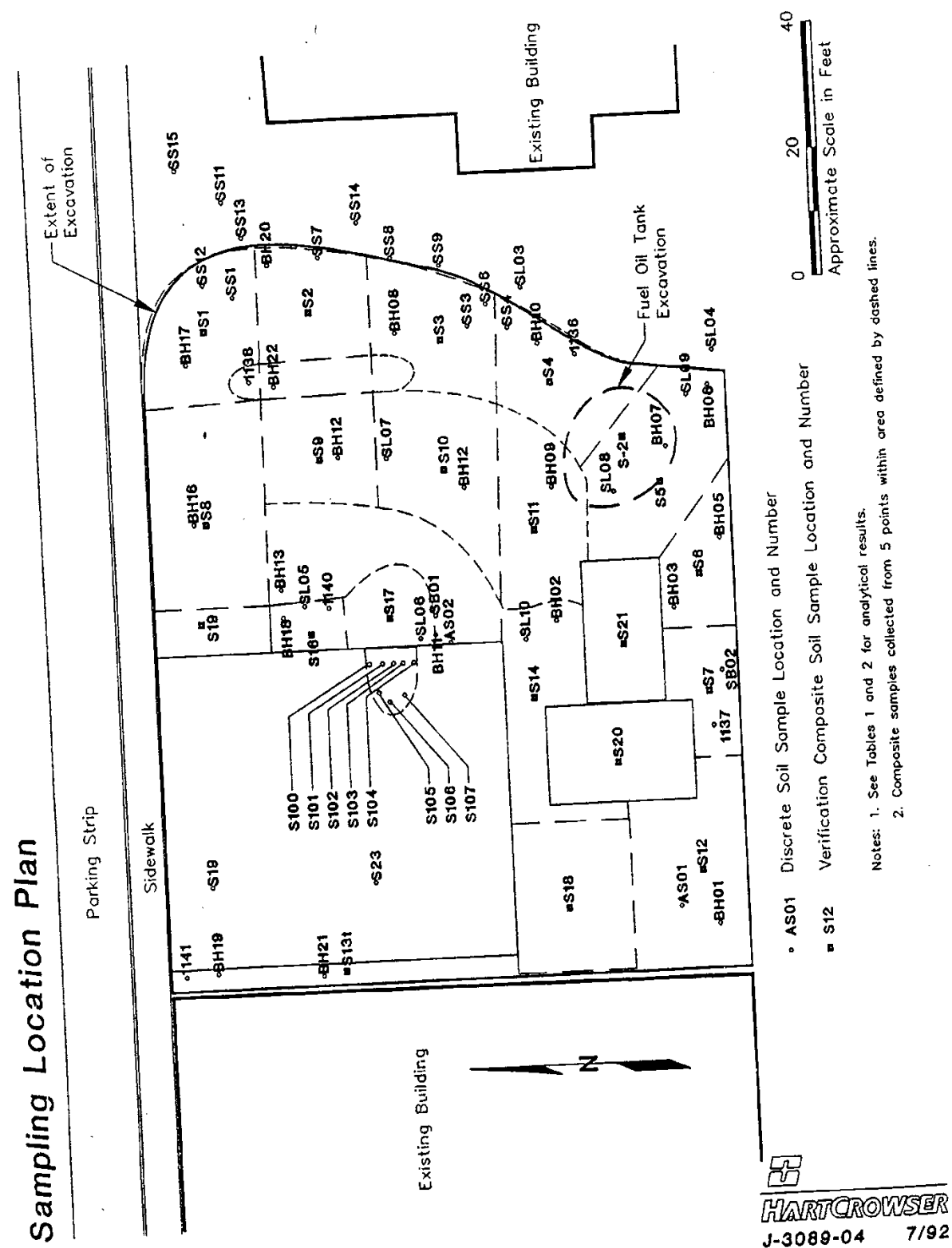
Ecology. *Site Visit.* June 8, 2015.

6.0 APPENDICES

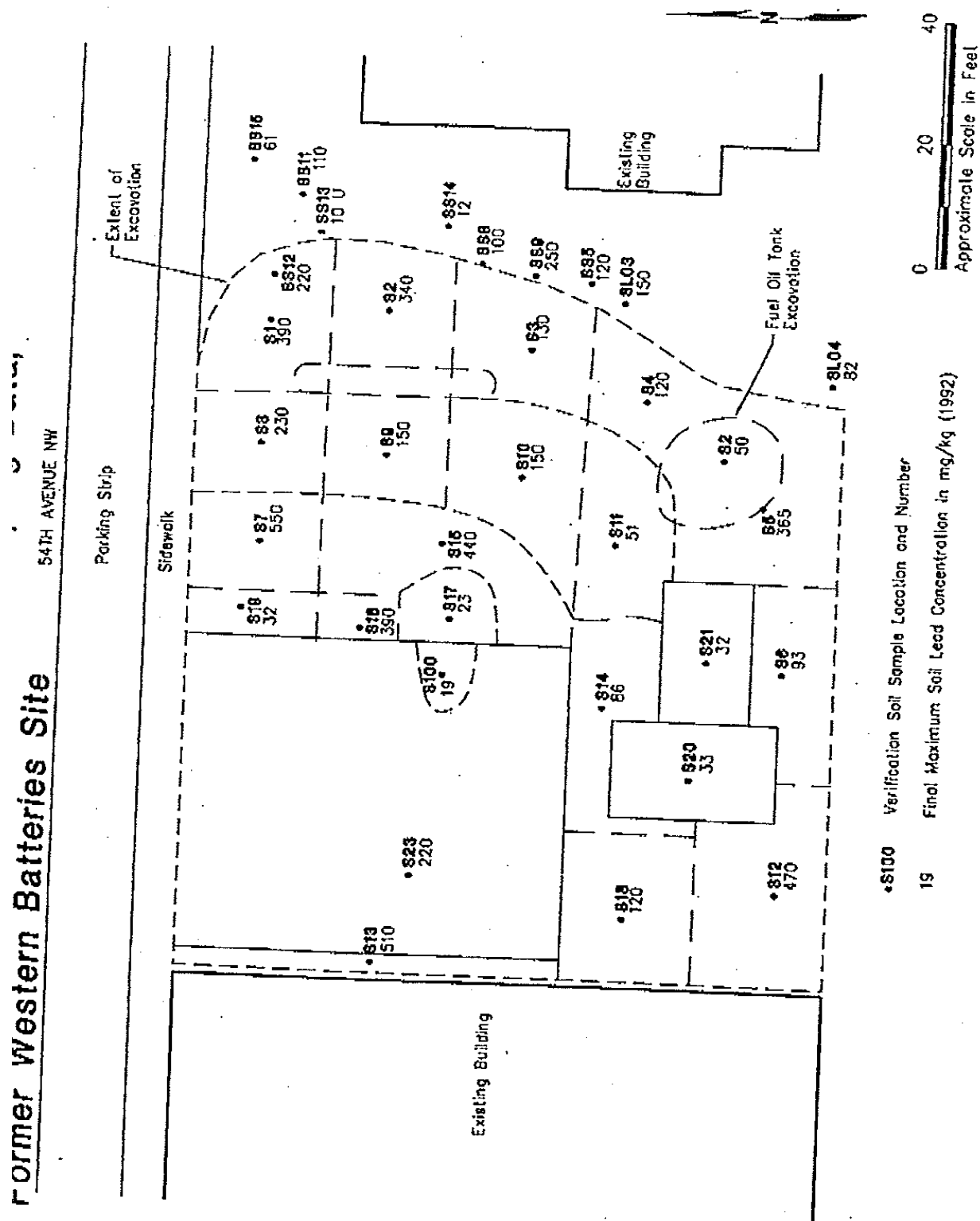
6.1 Vicinity Map



6.2 Site Plan



6.3 Post-Excavation Lead Concentrations in Soil



6.4 Restrictive Covenant

After Recording Return To:
Bogle & Gates P.L.L.C.
Two Union Square
601 Union Street
Seattle, WA 98101-2346
Attn: Jeffrey W. Leppo

DECLARATION OF RESTRICTIVE COVENANT

[REDACTED]

Grantor: JFFT Real Estate, Inc.

Grantee: State of Washington Department of Ecology

Abbreviated Legal Description: Lots 7 and 8, Block 136 of Gilman Park, Vol. 3 of Plats, Page 40, King County, Washington. Full legal description on page 3.

Assessor's Tax Parcel Number: 226830-0545-04

Related Documents: None

[REDACTED]

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980706-0305 09:57:00 AM KING COUNTY RECORDS 007 LLD 14.00

FORMER WESTERN BATTERIES, INC

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by JFFT Real Estate, Inc., its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following documents:

1. Technical Assistance Team Site Assessment Report for: Western Batteries, Seattle, Washington, TDD T10-8810-006. Ecology and Environment. Report prepared for EPA. 1988.
2. Site Characterization Study: Western Batteries, Inc. Facility, Seattle, Washington. Hart Crowser. Report prepared for Vaupell Industrial Plastics. 1991.
3. Cleanup Action Plan: Western Batteries, Inc. Facility, Seattle, Washington. Hart Crowser. Report prepared for Vaupell Industrial Plastics. 1992.
4. Site Remediation: Western Batteries, Inc. Facility, Seattle, Washington. Hart Crowser. Report prepared for Vaupell Industrial Plastics. 1992.

These documents are on file at Ecology's Northwest Regional Office (NWRO).

This Restrictive Covenant is required because upon completion of the Remedial Action, sampling indicated concentrations of lead of approximately 400 mg/kg in four locations (see Appendix A). The Model Toxics Control Act Method B Residential Cleanup Level for soil established under WAC 173-340-700(3)(b) is 250 mg/kg.

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The undersigned, JFFT Real Estate, Inc., is the fee owner of real property (hereafter "Property") in the County of King, State of Washington, that is subject to this Restrictive Covenant. The Property is legally described as follows: Lots 7 and 8, Block 136 of Gilman Park, according to the plat thereof recorded in Volume 3 of Plats, Page 40, Records of King County, Washington, situated in the City of Seattle, County of King, State of Washington.

JFFT Real Estate, Inc. makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1.

The Property is 0.2 acres of land located adjacent to the Vaupell Industrial Plastics building. Western Batteries, Inc. occupied the Property from approximately 1975 until 1989. During which time the Property was used for battery and equipment storage, as well as parking. In 1992, a remedial action was conducted as described in the documents previously identified and on file at Ecology's NWRO. A site map showing location of residual contamination is attached as Appendix A. Since the remedial action, a warehouse with a concrete/rebar floor has been constructed on the Property. The Property is completely covered by the concrete flooring, as are adjacent areas that were also remediated in 1992. There is no human or environmental exposure to the soil.

- a. The Property shall be used only for traditional industrial/commercial purposes, as described in RCW 70.105D.020(23) and defined in and allowed under the City of Seattle's

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zoning regulations codified in Chapter 23.50 of the Seattle Municipal Code as of the date of this

Restrictive Covenant.

- b. The Owner shall not alter, modify, or remove the existing structure in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Examples of activities that are prohibited on the Property include: demolition of the building, drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the concrete with a rod, spike or similar item, bulldozing or earthwork. Any activity on the Property that interferes with the continued protection of human health and the environment is prohibited.

Section 2.

The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for maintenance of the Remedial Action.

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The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.

Section 6.

The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

GRANTOR: JFFT REAL ESTATE, INC.,
a WASHINGTON corporation

By: Fred Tompkins
Frederick Tompkins, President

Dated this 1 day of July, 1998.

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STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

I certify that I know or have satisfactory evidence that Frederick Tompkins is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the President of JFFT Real Estate, Inc. to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: July 1st, 1998.

M. Charlene Finnelli
(Signature)

M. Charlene Finnelli
(Name legibly printed or stamped)
Notary Public in and for the State of Washington,
residing at Essaquah
My appointment expires 9/8/98

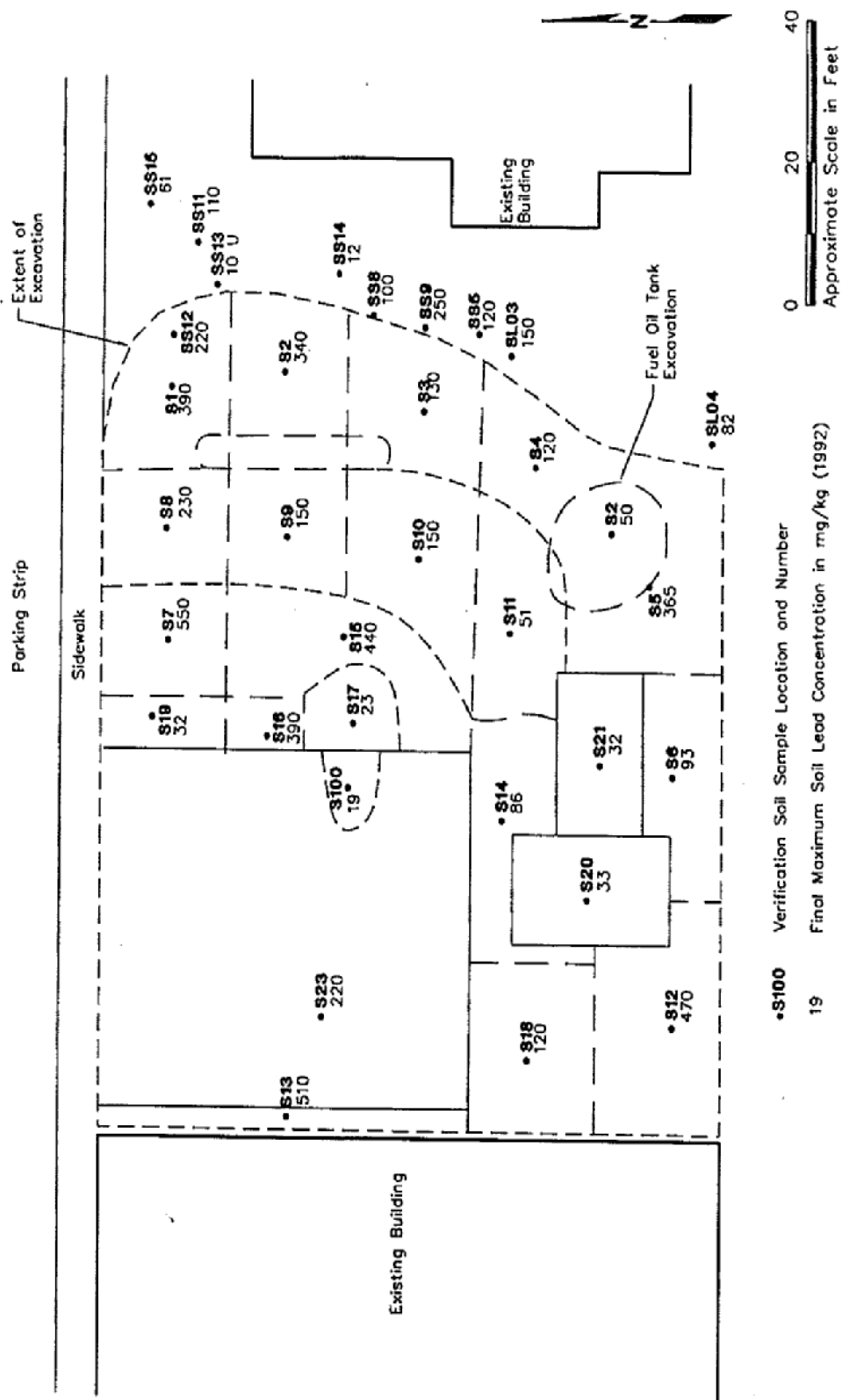


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Appendix A Final Verification Soil Sampling Data, Former Western Batteries Site

54TH AVENUE NW



•S100 Verification Soil Sample Location and Number

19 Final Maximum Soil Lead Concentration in mg/kg (1992)

6.5 Photo Log

Photo 1: Former Western Batteries Site – from the northeast



Photo 2: Loading Bay of Former Western Batteries Site - from the north



Photo 3: Former Western Batteries Site – from the northwest



Photo 4: North Side of Site and Surrounding Residential Land use – from the east

